

**REMARKS**

Claims 1-8 are pending in this application. By this Amendment, claims 1 and 8 are amended. No new matter is added. Claims 1 and 8 are the independent claims. Favorable reconsideration of this application, in light of the preceding amendments and following remarks, is respectfully requested.

**Claim Rejections - 35 U.S.C. § 103**

Claims 1, 4 and 6-8 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 3,248,515 ("Gormon") in view of U.S. Patent No. 6,079,243 ("Inoue"). Applicants respectfully traverse this rejection for the reasons discussed below.

In order to establish a *prima facie* case of obviousness under 35 U.S.C. § 103(a), all of the claim limitations of the rejected claims must be described or suggested by the cited document(s).<sup>1</sup> Applicants respectfully submit that the cited documents do not meet this criteria, because no combination and/or modification of the Gordon and the Inoue references will describe or suggest all of the claim limitations of rejected claims 1, 4 and 6-8, and therefore, a *prima facie* case of obviousness has not been established.

For example, claim 1, as amended, recites, *inter alia*:

an inner layer region embedded with a particulate additive of at least polytetrafluoroethylene (PTFE) and an outer layer region being not blended with the additive. (*emphasis added*)

In the outstanding Office Action, the Examiner admits that "Gormon does not teach the inner region containing particulate additive of at least polytetrafluoro-

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<sup>1</sup> See *In Re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). See also MPEP § 2143.03.

ethylene (PTFE) and an outer layer region being not blended with the additive.”<sup>2</sup>

However, the Examiner attempts to remedy the admitted deficiency of Gormon by arguing that the Inoue reference discloses the “the inner region containing particulate additive of at least polytetrafluoroethylene (PTFE).” Applicants respectfully disagree.

The Inoue reference discloses a method of manufacturing welding wires by drawing raw wires through a dry hole die to obtain dry hole-drawn wires, wherein powder lubricants, e.g., MoS<sub>2</sub> and WS<sub>2</sub>, are applied to the raw wires during the drawing of the wires through the dry hole die; and coating the wet hole-drawn wires with lubricating oil to obtain welding wires. (*see col. 10, lines 38-48, and claim 1 of the Inoue reference*). In other words, the Inoue reference merely discloses applying powder lubricants on the surface of the hole die, rather than “embedding” the inner layer region with the particulate additive of at least polytetrafluoroethylene (PTFE). Such a powder lubricant would stay on the surface, and no “alloyed” inner composite layer can be formed. In addition, using a lubricant applied to a surface, either the tube or the wire, does not change the properties of the lead tube in any way. In fact, using a lubricant does not operate in the same manner as mixing an additive to a matrix material in order to form a composite material or structure.

Accordingly, Applicants respectfully submit that the Gordon and the Inoue references, individually or in combination, fail to disclose, or even suggest, “an inner layer region embedded with a particulate additive of at least polytetrafluoroethylene (PTFE) and an outer layer region being not blended with the additive,” as recited in amended claim 1.

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<sup>2</sup> See Office Action mailed July 15, 2008, page 2

Since the rejection fails to disclose or suggest each and every element of the rejected claims, Applicants respectfully submit that no *prima facie* case of obviousness has been established with respect to claim 1.

In view of the above, Applicants respectfully submit that the Gordon and the Inoue references fail to teach or suggest each and every element of claim 1, and therefore, claim 1 is allowable over the cited prior art. Claim 8 is also allowable for the similar reasons discussed above regarding claim 1. Claims 4, 6, and 7 are dependent from claim 1, and therefore, also allowable. Accordingly, Applicants respectfully request that the rejection under 35 U.S.C. § 103(a) be reconsidered and withdrawn.

Claims 2-3 and 5 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Gormon in view of Inoue as applied to claim 1 above, and further in view of Jamison (CRC Handbook of Lubrication and Tribology, 1994). Applicants respectfully traverse this rejection for the reasons discussed below.

Claims 2-3 and 5 are believed to be allowable for at least the reasons set forth above regarding claim 1. The Jamison reference fails to provide the teachings noted above as missing from the Gordon and the Inoue references. Since claims 2-3 and 5 are patentable at least by virtue of their dependency on claim 1, Applicants respectfully request that the rejection of claims 2-3 and 5 under 35 U.S.C. § 103(a) be withdrawn.

Claims 1-8 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Gormon in view of Inoue and further in view of U.S. Patent No. 6,086,970 ("Ren"). Applicants respectfully traverse this rejection for the reasons discussed below.

In order to establish a *prima facie* case of obviousness, the Examiner must establish that it would have been obvious for one of ordinary skill to have combined the teachings of the cited documents.<sup>3</sup> One way to establish this would be to show “some articulated reasoning with some rationale underpinning to support the legal conclusion of obviousness” and “identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does.”<sup>4</sup> Furthermore, the Examiner must make “*explicit*” this rationale of “the apparent reason to combine the known elements in the fashion claimed,” including a detailed explanation of “the effects of demands known to the design community or present in the marketplace” and “the background knowledge possessed by a person having ordinary skill in the art.”<sup>5</sup>

It is respectfully submitted that the Examiner has not met these criteria. For example, the Examiner asserts that:

it would have been obvious to a person of ordinary skill in the art at the time of the invention to form the inner plastic tubing layer of Gormon using lubricating particles suggested by Ren because it would provide an enhanced lubricity and collapse strength to a finished tubing of Gormon.<sup>6</sup>

However, it is respectfully submitted that the above statement is merely conclusory and do not comprise an “*explicit rationale*” as required by *KSR Int’l*.

In addition, Applicants respectfully submit that the mere disclosure of a particulate additive composition of at least PTFE is insufficient to establish a motivation to combine. In particular, Applicants note that the relevant inquiry is not whether the Ren reference discloses an additive composition, but rather whether one

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<sup>3</sup> See *KSR Int’l Co. v. Teleflex, Inc.*, 550 U.S. at \_\_\_, 82 USPQ2d at 1396 (2007).

<sup>4</sup> *Id.*

<sup>5</sup> *Id.*

<sup>6</sup> See Office action mailed December 20, 2007, page 3, paragraph 5b.

or ordinary skill in the art would *desire* to combine the Ren and the Inoue and Johnston references in order to arrive at the claimed invention. *See, e.g.*, MPEP 2143.01(III), which states “[t]he mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination,” citing In re Mills.<sup>7</sup> That is, establishing motivation requires the Examiner to demonstrate why one of ordinary skill in the art, absent the teachings of Applicants’ application, would want to replace the inner layer region of the Inoue and Johnston references with the inner layer region containing additive composition of the Ren reference. For instance, the Gormon reference teaches a lead tube for wire and a separate surrounding casing. The Johnston reference discloses lubricating the wire with a liquid lubricant, *viz.*, the lubricant must be a liquid fluid in order to be able to apply it through the holes in the casing. The Ren reference discloses using a particulate matter, including PTFE, as an additive mixed with polymer, whereby the tube of the Ren reference has an even *consistency* over the cross section (which is inconsistent to the purpose of Inoue and Johnston, i.e., decrease accumulation of debris and fouling so as to prevent and/or reduce sticking of the wire on the guide). In addition, the Ren reference explicitly teaches that the lubricant is formed over the external surface of the tube (*see lines 6-7 of the Abstract*). Therefore, it would not have been obvious to apply the lubricant in the inner tube without destroying the teachings of the Ren reference. Thus, Applicants respectfully submit that the outstanding Office Action has failed to provide an objective teaching that demonstrates why one of ordinary skill in the art would be motivated to modify and/or combine the teachings of the Fontirroche and the Ren references.

Further, Applicants respectfully submit that the Ren references explicitly *teach*

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<sup>7</sup> 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990).

away from the claimed subject matter. In particular, the claimed subject matter relates to a *filler wire guide tube for guiding a filler wire*. The filler wire is not clinically cleaned and debris may be detached from the wire material itself. Since the wire guide is supposed to feed thousands of meters of filler wire during its operation, plugging of the wire may occur. As such, the wire guide tube of the claimed subject matter is to decrease accumulation of debris and fouling so as to prevent and/or reduce sticking of the wire on the guide.<sup>8</sup>

In contrast, the Ren references teach a tube for a catheter used in the medical field, i.e., contamination or fouling is not a problem since the guide wire is pushed through the tube only limited times at short interval and in a sterile environment. That is, the guide tube in the claimed subject matter, for example, welding torch, is supposed to operate in an industrial environment and must be able to feed thousand of meters of filler wire without sticking due to fouling. Accordingly, one skilled in the art would not look to in the field of medical catheters to combine in the field of welding wire, and thus, Applicants respectfully submit that no *prima facie* case of obviousness has been established.

In view of the above, Applicants respectfully submit that the Inoue, the Johnston, and the Ren references fail to establish a proper *prima facie* case of obviousness, and therefore, claims 1 and 8 are allowable over the cited prior art. Claims 2-7 are dependent from claim 1 and, therefore, also allowable. Accordingly, Applicants respectfully request that the rejection under 35 U.S.C. § 103(a) be reconsidered and withdrawn.

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<sup>8</sup> See instant disclosure, page 1, line 24 – page 2, line 13.



**CONCLUSION**

In view of the above remarks and amendments, Applicants respectfully submit that each of the pending objections and rejections has been addressed and overcome, placing the present application in condition for allowance. A notice to that effect is respectfully requested. Further, the above remarks demonstrate the failings of the outstanding rejections, and are sufficient to overcome the rejections. However, these remarks are not intended to, nor need they, comprehensively address each and every reason for the patentability of the claimed subject matter over the applied prior art. Accordingly, Applicants do not contend that the claims are patentable solely on the basis of the particular claim elements discussed above.

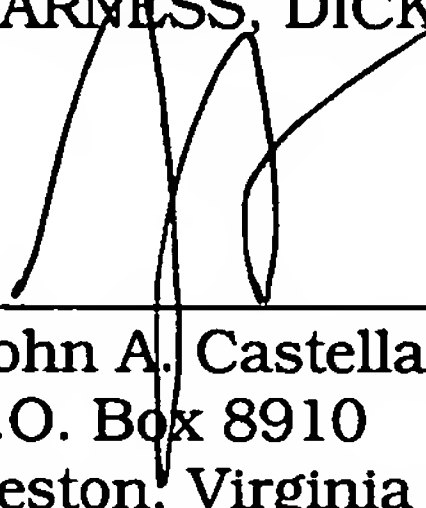
Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the undersigned at the telephone number below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

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By

  
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